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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/619,294

07/15/2003

Nick S. Bromer

6307

7590

02/08/2007

Nick Bromer

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Marietta, PA 17547-9311

EXAMINER

PENDLETON, DIONNE

ART UNIT

PAPER NUMBER

2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/619,294

Applicant(s)

BROMER, NICK S.

Examiner

Dionne H. Pendleton

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-9 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 6 8 9 14 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>2/5/2007</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/21/03; 2/10/04</u> . | 6) <input type="checkbox"/> Other: _____.  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims directed to the following patentably distinct species:

Species 1, shown in FIG. 1.

Species 2, shown in FIGS. 2,3 and 5.

Species 3, shown in FIG. 4.

The species are independent or distinct because The Applicant's specification fails to disclose that each embodiment is an obvious variation, one over every other embodiment.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there are no generic claims.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species.  
MPEP § 809.02(a).

**2. During a telephone conversation with Nick Bromer on 1/23/2007 a provisional election was made without traverse to prosecute the invention of Species 2, shown in FIGS 2,3 and 5, claims 1-4, 6, 8, 9, 14 and 16-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7 and 15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.**

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims.

Therefore, *"tilted inward"* recited in claim 4,

*"a center point of the arc"* recited in claim 9, and

*"tilted at a same angle"*, recited in claim 21

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 4 and 21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, Claim 4 recites the limitation "the surface" in line 3. There is insufficient antecedent basis for this limitation in the claim.

*Claim 21 is rejected due to its' dependency upon rejected base claim 4.*

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-4,6,8,9,14 and 16-21** are rejected under 35 U.S.C. 102(b) as being anticipated by **Schupbach (US 4,837,826)**.

Regarding claim 1, Schupbach teaches, in **figure 13**, a loudspeaker for outputting sound in a frequency range including a lowest frequency  $f$ , the lowest frequency inherently having a wave number  $k$ , the loudspeaker comprising:

In **figure 13**, an arrangement in a semi-circle for radiating a sound wave, which reads on “a generally arcuate source of wind pulsating at the frequency  $f$ ”;

The semi-circle arrangement of the loudspeakers reads on “the source having an arcuate radius  $r$ ” such that a quantity  $rk$  is *approximately* equal to or larger than one, as broadly claimed; and whereby wind is converted to sound via loudspeaker components, and the bass frequency response is improved, via arcuate arrangement of the loudspeaker components.

Regarding claim 2, **FIG. 13** of Schupbach teaches that the generally arcuate source of wind comprises a plurality of electrodynamic loudspeakers disposed in an arcuate array.

Art Unit: 2615

Regarding claim 3, **FIG. 13** teaches a center baffle area **39,40** aligned with a plane defined by the generally arcuate source of wind.

Regarding claim 4, **FIG. 13** teaches that each speaker is mounted such that they are not perfectly vertical, but rather a bottom perimeter of each speaker is tilted in a forward direction, which reads on "are tilted inward."

Regarding claim 6, Schupbach teaches a hollow cabinet in which the loudspeakers are mounted.

Regarding claim 8, **figure 13** teaches that the bottom surface of the cabinet serves as the "mount" for mounting said speaker cabinet on the floor, said floor reading on "symmetry baffle"; and further wherein said symmetry baffle is substantially perpendicular to the central baffle **39,40**, and wherein the arcuate source of wind extends around an arc, as claimed.

Regarding claim 9, Schupbach teaches that the floor, which reads on "symmetry baffle" is a radial symmetry baffle and a center point of the arc lies adjacent the symmetry baffle.

Regarding claim 14, Schupbach teaches that the floor, which reads on "symmetry baffle" is a radial symmetry baffle.

Regarding claim 16, **figure 13** of Schubach teaches a loudspeaker comprising a plurality of electrodynamic speakers mounted in a panel and surrounding a central area **39,40** in which there are none of the loudspeakers, and wherein the central area is larger in diameter than a speaker diameter.

Regarding claim 17, Schubach teaches that the sound signal produced by the loudspeaker of **FIG. 13**, i.e., "wind", has a direction generally perpendicular to an arcuate plane of the source.

Regarding claim 18, the method of claim 18 is inherently taught by the apparatus of **FIG. 13**, in Schubach. See the rejection of claim 1, above.

Regarding claim 19, Schubach teaches a method comprising providing a central baffle **39,40** aligned with a plane defined by the generally arcuate source of wind.

Regarding claim 20, Schubach teaches a method comprising providing at least one symmetry baffle (see the floor) aligned substantially perpendicular to the central baffle **39,40**, and providing a generally arcuate source of wind around an arc to meet the symmetry baffle generally perpendicular.



Regarding claim 21, Schupbach teaches in **FIG. 13** that the speakers are "all tilted at a same angle."

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Norris (US Patent Number 7,088,830)** teaches a ring emitter.

**Janszen (US Patent Number 3,931,867)** teaches a loudspeaker arrangement.

**Oliemuller (US Patent Number 6,625,289)** teaches a loudspeaker arrangement.

**Tarkkonen (US Patent Number 5,227,591)** teaches a loudspeaker arrangement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne H. Pendleton whose telephone number is 571-272-7497. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dionne Pendleton



**DANIEL SWERDLOW**  
**PRIMARY PATENT EXAMINER**